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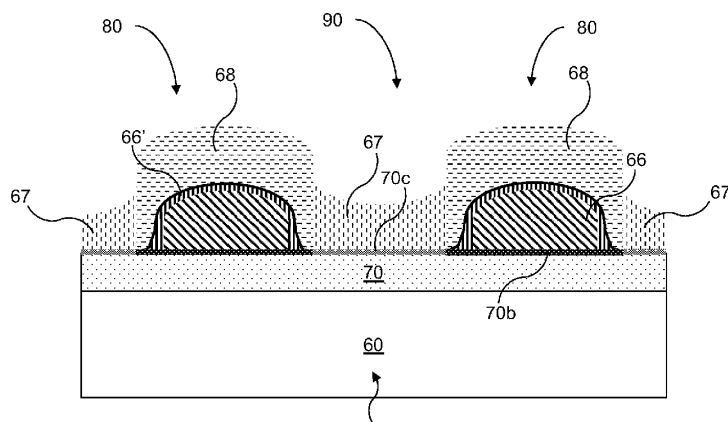


FIG. 3C

(57) Abstract: Herein is provided a solar cell comprising: a substrate having a back surface; a passivation layer arranged on the back surface of the substrate, the passivation layer comprising a back surface; and an interdigitated back contact. The interdigitated back contact comprises a first charge-carrier collector arranged on the back surface of the passivation layer and interdigitated with a second charge-carrier collector arranged on the back surface of the passivation layer. The first charge-carrier collector comprises: a plurality of first doped elements arranged on the back surface of the passivation layer, the first doped elements having a first conductivity type; an oxide layer arranged on the first doped elements; and a plurality of second doped elements arranged on the oxide layer, the second doped elements having a second conductivity type that is opposite the first conductivity type. The second charge-carrier collector comprises a plurality of third doped elements arranged on the back surface of the passivation layer, the third doped elements having the second

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conductivity type. Also provided is a solar cell comprising: a substrate having a back surface; a passivation layer arranged on the back surface of the substrate, the passivation layer comprising a back surface; and an interdigitated back contact. The interdigitated back contact comprises a first charge-carrier collector arranged on the back surface of the passivation layer and interdigitated with a second charge-carrier collector arranged on the back surface of the passivation layer; The first charge-carrier collector comprises a plurality of first doped elements arranged on the back surface of the passivation layer, the first doped elements having a first conductivity type; and a plurality of second doped elements arranged on the first doped elements, the second doped elements having a second conductivity type that is opposite the first conductivity type. The second charge-carrier collector comprises a plurality of third doped elements arranged on the back surface of the passivation layer, the third doped elements having the second conductivity type; and the third doped elements are more crystalline than the first doped elements and/or the second doped elements. Also provided are methods of manufacturing said solar cells.